

Work Order ID 128763

128763

Page 1

January-23-15 2:43:17 PM

Item ID: D4956-37 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearplate Aft
 Start Date: 1/23/15 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 1/29/15 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: 15-01-26 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4956	A

100		0.00							
100									
Waterjet		0.00				<u>13</u>	<u>Ø</u>		<u>Jm 15-1-31</u>

FLOW CNC Waterjet
 304.040.
 Memo
 1-Cut as per Dwg
 Dwg Rev: A
 Prog Rev: A
 2-Deburr if necessary

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC		0.00				<u>13</u>	<u>Ø</u>		<u>Jm 15-1-31</u>

Quality Control

Page 2

FEB 03 2015

Work Order ID 128763

128763

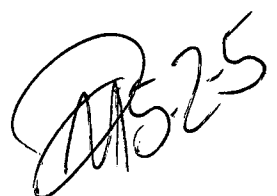
Page 4

January-23-15 2:43:18 PM

Item ID: D4956-37 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Wearplate Aft
Start Date: 1/23/15 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 1/29/15 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

MLJ 1502-06


Picklist Print

January-23-15 2:43:17 PM

Page 1

Work Order ID: 128763

128763

Parent Item: D4956-37

D4956-37

Parent Item Name: Wearplate Aft

Start Date: 1/23/15

Required Date: 1/29/15

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP REV:A 14.04.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S20GA

Purchased

No

sf

196.2639

7

M304S20GA

**

Jm 15-1-31

304/316 .040 Sheet

Location

Loc Qty

Loc Code

MAT020

196.2639

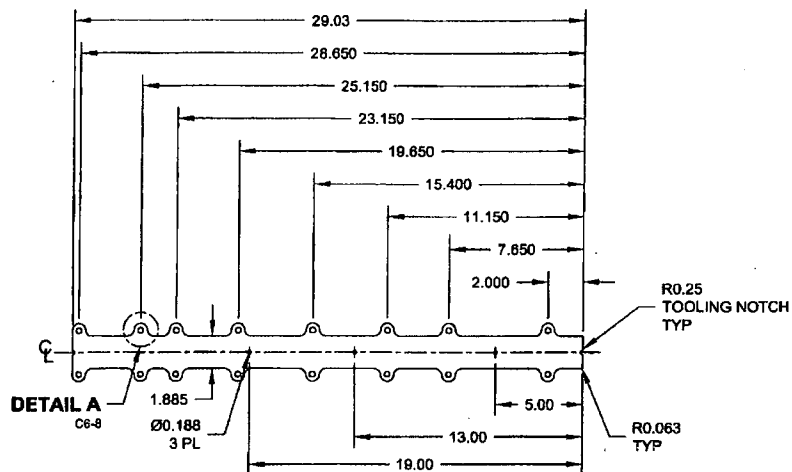
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3.7639

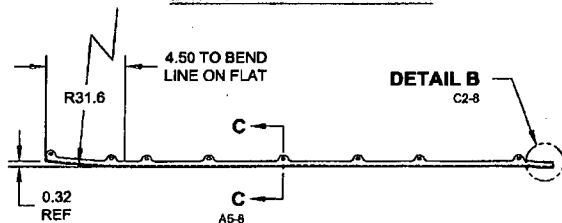
m131060

192.5

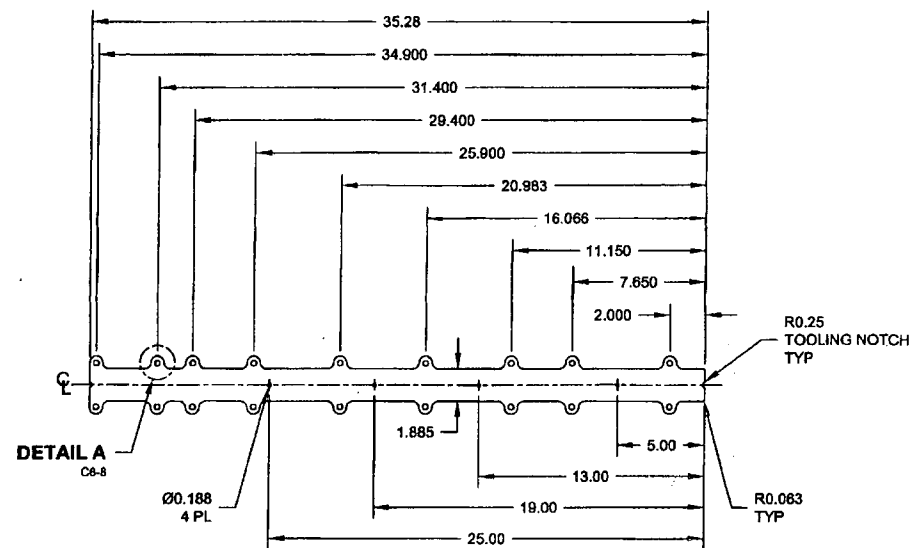
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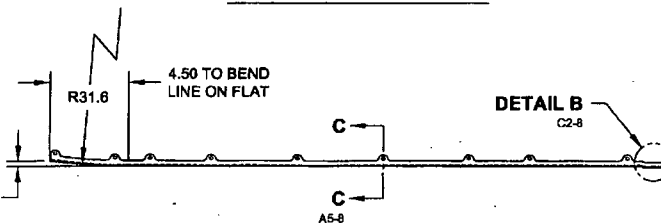
D4956-11F FLAT PATTERN



D4956-11 WEARSHOE
(MAKE FROM D4956-11F)



D4956-13F FLAT PATTERN



D4956-13 WEARSHOE
(MAKE FROM D4956-13F)

NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.038 THICK (20 GAUGE)
PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: D4956-11 = 0.68 lbs; D4956-13 = 0.82 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

A		NEW ISSUE		MB		13.09.26	
REV.		DESCRIPTION		BY		DATE	
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. A		SHEET 1 OF 8	
DRAWN				D4956			
CHECKED		DRAWING NO.		TITLE		SCALE	
MFG. APPR.				WEARSHOE		NTS	
APPROVED							
DE APPR.							
DATE		13.09.26					

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RELEASED
2014-04-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

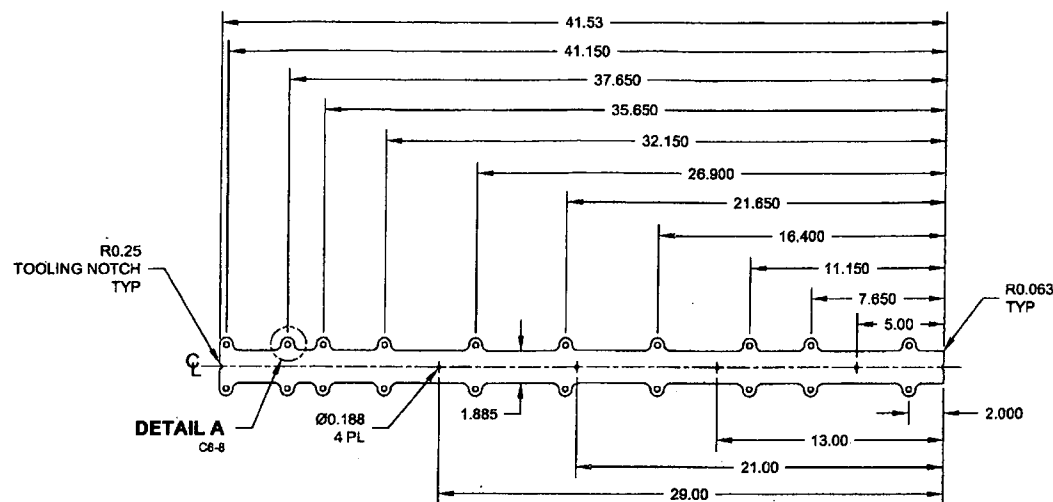
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube ☐</td> <td style="width: 25%;">Crosstube ☐</td> <td style="width: 25%;">Water Jet ☐</td> <td style="width: 25%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

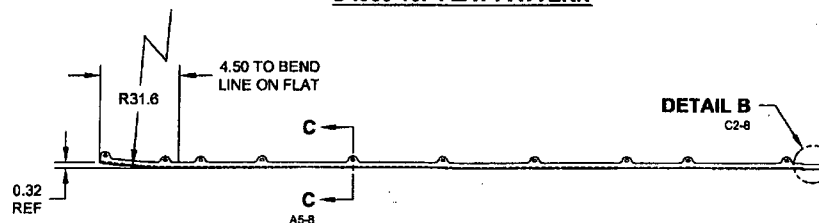
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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D4956-15F FLAT PATTERN



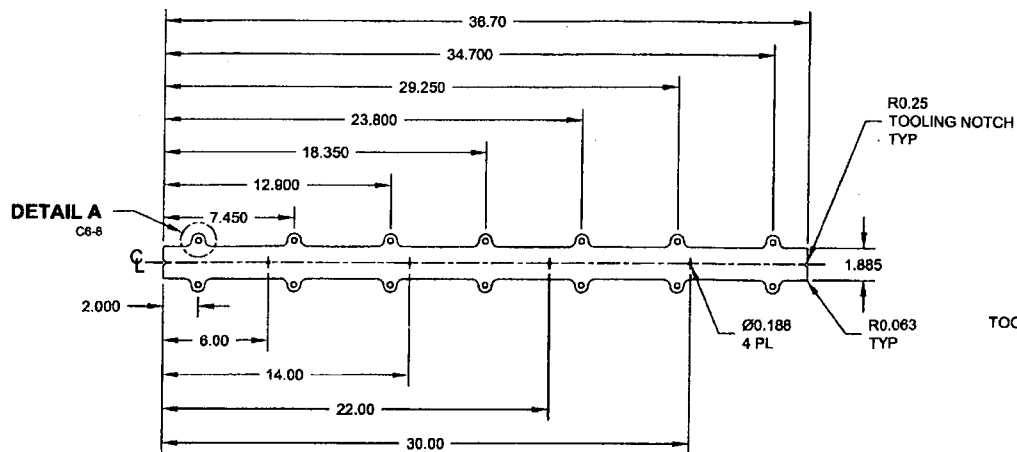
D4956-15 WEARSHOE
(MAKE FROM D4956-15F)

NOTES

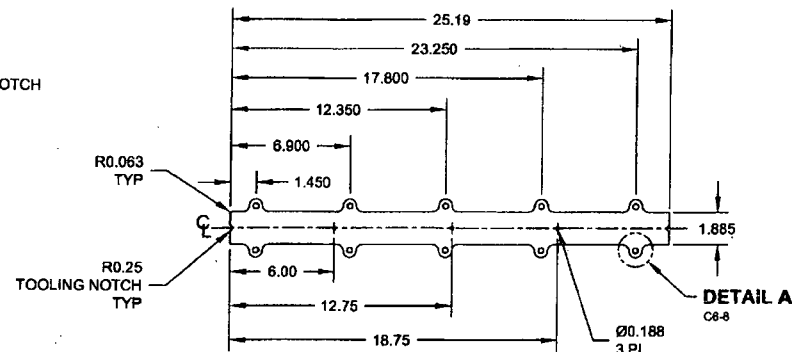
- 1) MATERIAL: AISI 304/316 SS SHEET, 0.038 THICK (20 GAUGE)
PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 0.95 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4956	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE	NTS
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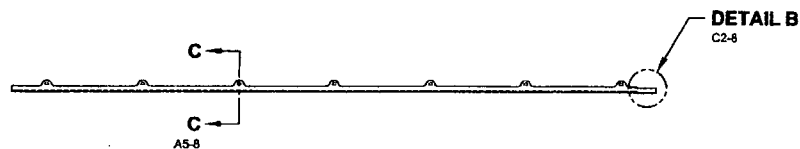
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2014-04-17



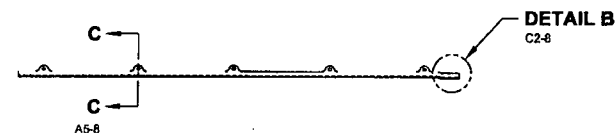
D4956-21F FLAT PATTERN



D4956-25F FLAT PATTERN



D4956-21 WEARSHOE
(MAKE FROM D4956-21F)



D4956-25 WEARSHOE
(MAKE FROM D4956-25F)

NOTES

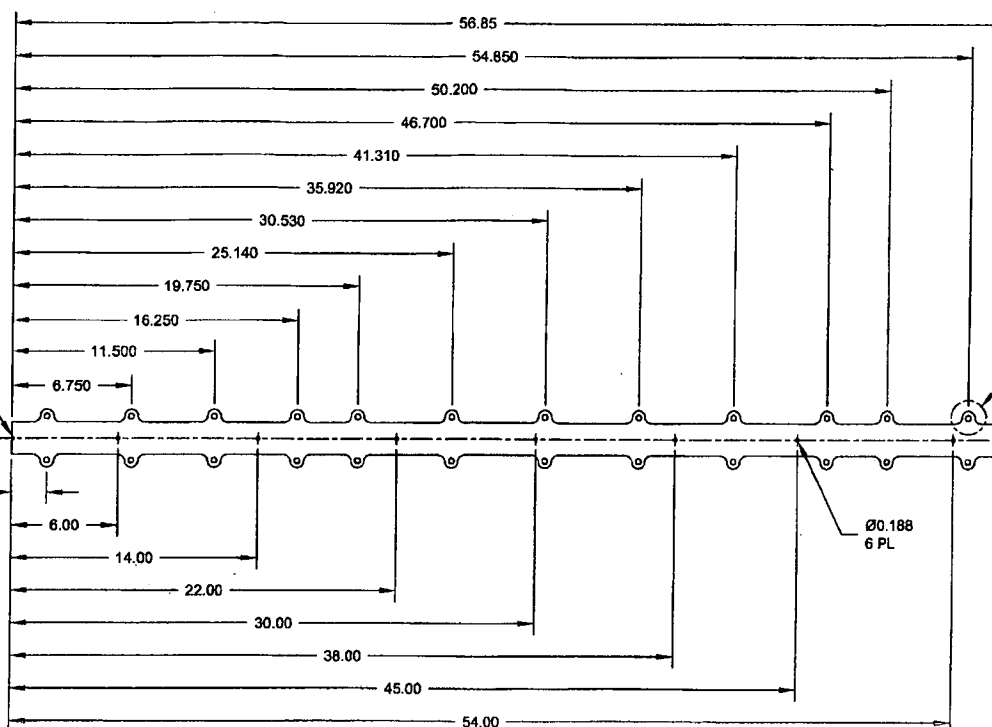
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- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: D4956-21 = 0.82 lbs; D4956-25 = 0.58 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

RELEASED
2014-04-17
MD

DESIGN	<i>JS</i>	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AP</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>AS</i>	D4956	SHEET 3 OF 8
APPROVED	<i>JS</i>	TITLE	SCALE
DE APPR.	<i>JS</i>	WEARSHOE	NTS
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R0.25
TOOLING NOTCH
TYP

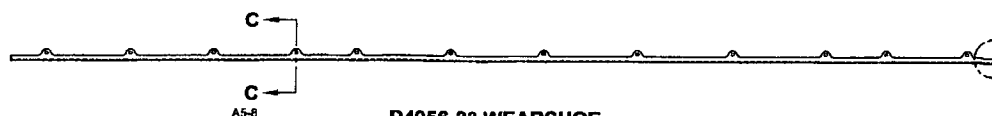
2.000



DETAIL A
C6-8

R0.063
TYP

D4956-23F FLAT PATTERN



D4956-23 WEARSHOE (MAKE FROM D4956-23F)

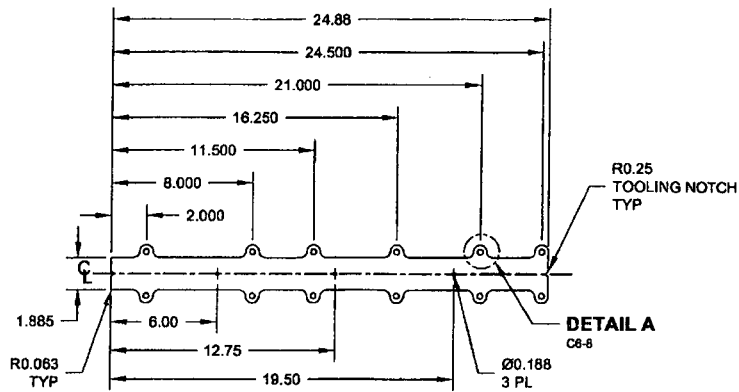
DETAIL B
C2-8

NOTES

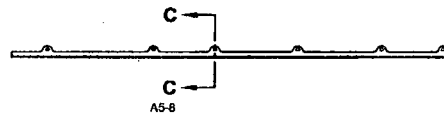
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- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: 1.29 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

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2014-04-17
MP

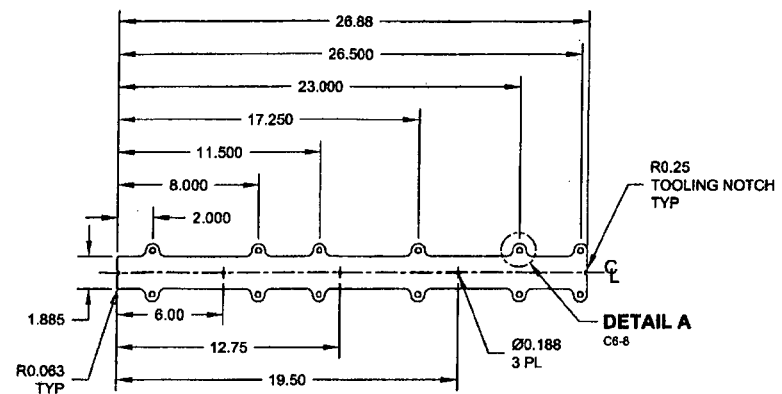
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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	AS	D4956	SHEET 4 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.		WEARSHOE	NTS
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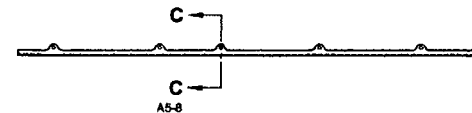
D4956-31F FLAT PATTERN



D4956-31 WEARSHOE
(MAKE FROM D4956-31F)



D4956-33F FLAT PATTERN



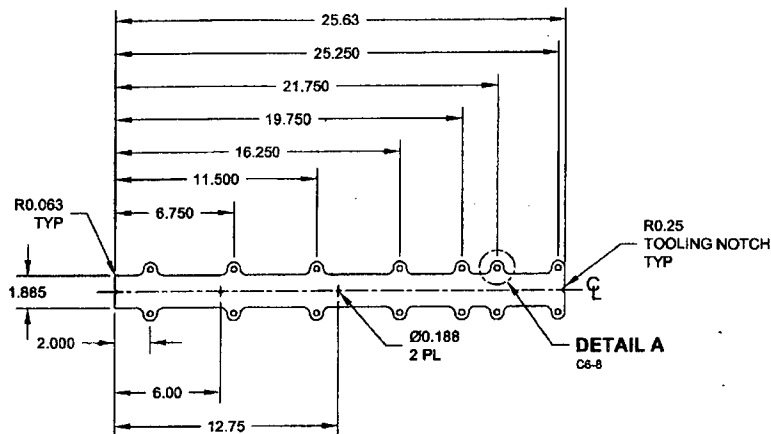
D4956-33 WEARSHOE
(MAKE FROM D4956-33F)

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2014-04-17

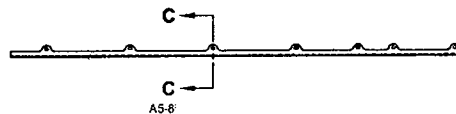
NOTES

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- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: D4956-31 = 0.57 lbs; D4956-33 = 0.61 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

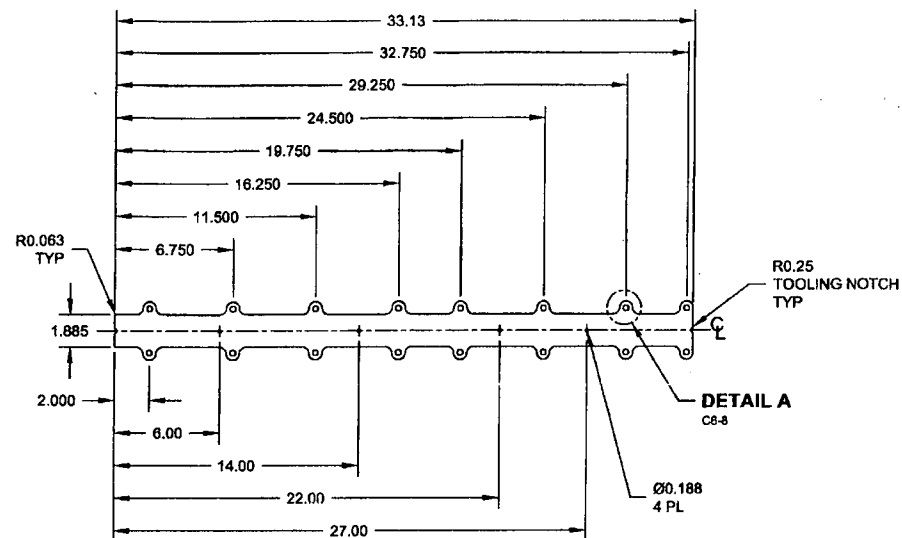
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DRAWN			
CHECKED	A.P.	DRAWING NO.	REV. A
MFG. APPR.	N	D4956	SHEET 5 OF 8
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE	NTS
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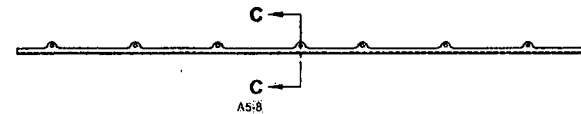
D4956-35F FLAT PATTERN



D4956-35 WEARSHOE
(MAKE FROM D4956-35F)



D4956-37F FLAT PATTERN



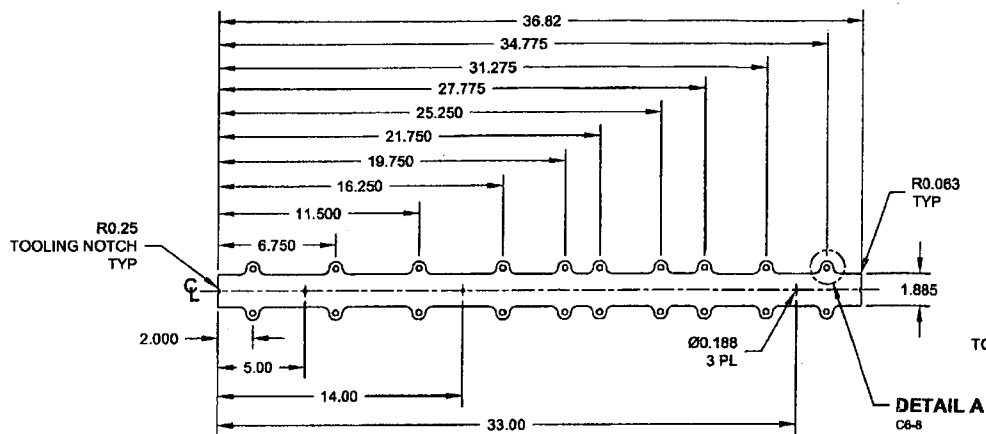
D4956-37 WEARSHOE
(MAKE FROM D4956-37F)

NOTES

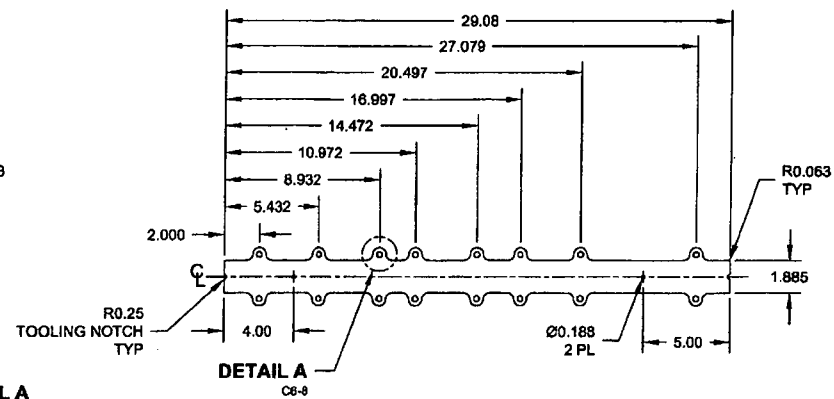
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- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: D4956-35 = 0.60 lbs; D4956-37 = 0.76 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4956	SHEET 6 OF 8
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE	NTS
DATE	13.09.26	COPYRIGHT © 2013 BY DART AEROSPACE LTD	
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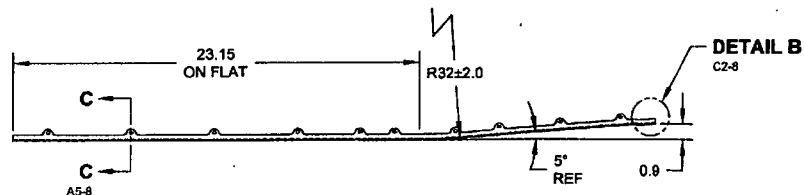
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2014-04-17



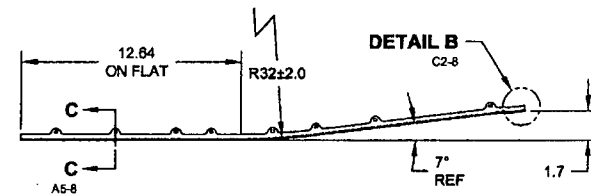
D4956-39F FLAT PATTERN



D4956-41F FLAT PATTERN



D4956-39 WEARSHOE
(MAKE FROM D4956-39F)



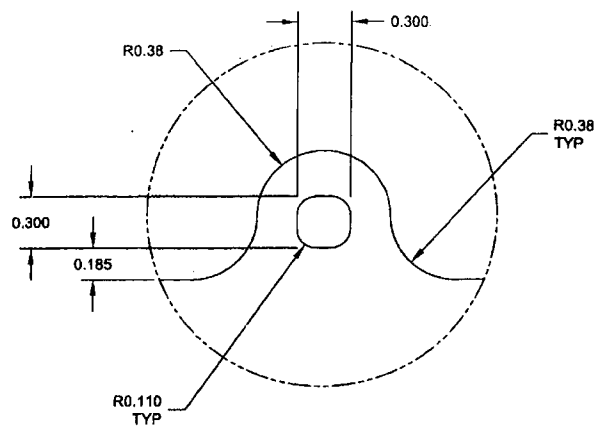
D4956-41 WEARSHOE
(MAKE FROM D4956-41F)

RELEASED
2014-04-17

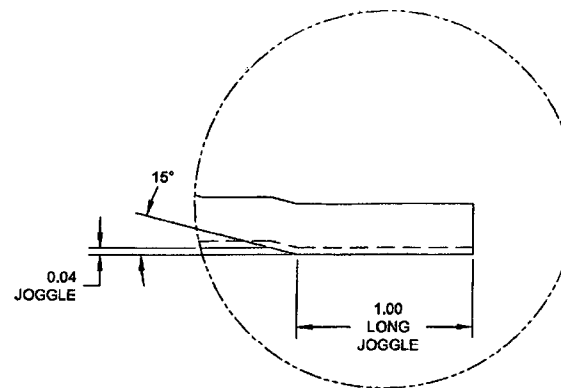
NOTES

- 1) MATERIAL: AISI 304/316 SS SHEET, 0.038 THICK (20 GAUGE)
PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240
REF DART SPEC M304S20GA
- 2) FINISH: COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9
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- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N AND B/N PER DART QSI 044 6.1 (FINE POINT PAINT MARKER)
- 7) WEIGHT: D4956-39 = 0.88 lbs; D4956-41 = 0.68 lbs
- 8) SYMMETRY: ABOUT CENTERLINE

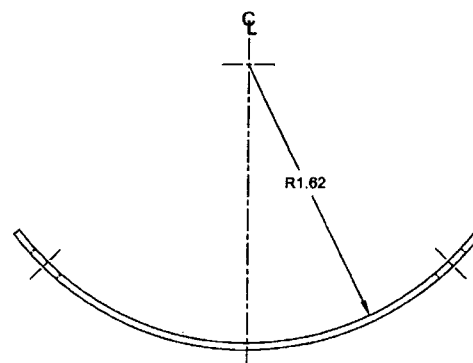
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DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D4956	SHEET 7 OF 8
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE	NTS
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DETAIL A C8-1 C4-1
C8-2
C8-3 C1-3
C2-4
C8-6 C2-5
C8-6 C2-6
C4-7 C3-7



DETAIL B B6-1 B2-1
B3-2
B5-3 B1-3
B2-4
B4-7 B1-7



SECTION C-C B7-1 B3-1
B5-2
B7-3 B3-3
B6-4
B7-5 B3-5
B7-6 B3-6
B7-7 B3-7

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